

CLAIMS:

1. (cancelled)

2. (original) An image decoding method of decoding encoded data encoded by an image encoding method of dividing image signals into blocks, performing an orthogonal transform of each block, reading resultant orthogonal transform coefficients to obtain a coefficient string, and performing entropy coding thereof, the image decoding method comprising:

a block selecting step of selecting a size of a block for the orthogonal transform, out of a plurality of blocks of different sizes;

a decoding step for performing decoding of the encoded data by entropy coding adapted to a coefficient string in a block of a minimum size out of the plurality of blocks; and

a coefficient string constructing step of, when a block of a size larger than the minimum size is selected in the block selecting step, constructing a coefficient string of the block of the larger size from a plurality of coefficient strings decoded in the decoding step.

3-5. (cancelled)

6. (original) An image decoding apparatus of decoding encoded data encoded by an image encoding method of dividing image signals into blocks, performing an orthogonal transform of each block, reading resultant orthogonal transform coefficients to obtain a coefficient string, and performing entropy coding thereof, the image decoding apparatus comprising:

block selecting means for selecting a size of a block for the orthogonal transform, out of a plurality of blocks of different sizes;

decoding means for performing decoding of the encoded data by entropy coding adapted to a coefficient string in a block of a minimum size out of the plurality of blocks; and

coefficient string constructing means for, when a block of a size larger than the minimum size is selected by the block selecting means, constructing a coefficient string of the block of the larger size from a plurality of coefficient strings decoded by the decoding means.

7. (original) The image decoding apparatus according to Claim 6, wherein the coefficient string constructing means is configured to read coefficients in the plurality of coefficient strings decoded by the decoding means, from the lowest in a low frequency region and write the coefficients read out of the respective coefficient strings, one by one in order into a new coefficient string from the low frequency region, thereby obtaining the constructed coefficient string.

8. (original) The image decoding apparatus according to Claim 6, wherein the coefficient string constructing means is configured to read coefficients in the plurality of coefficient strings decoded by the decoding means, from the lowest in a low frequency region and write the read coefficients in units of the original coefficient strings into a new coefficient string from the low frequency region, thereby obtaining the constructed coefficient string.

9. (cancelled)

10. (original) An image decoding program for decoding encoded data encoded by an image encoding method of dividing image signals into blocks, performing an orthogonal transform of each block, reading resultant orthogonal transform coefficients to obtain a coefficient string, and performing entropy coding thereof, the image decoding program letting a computer execute:

a block selecting step of selecting a size of a block for the orthogonal transform, out of a plurality of blocks of different sizes;

a decoding step for performing decoding of the encoded data by entropy coding adapted to a coefficient string in a block of a minimum size out of the plurality of blocks; and

a coefficient string constructing step of, when a block of a size larger than the minimum size is selected in the block selecting step, constructing a coefficient string of the block of the larger size from a plurality of coefficient strings decoded in the decoding step.